

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (Previously Presented): A camera control system for controlling a video camera from a computer terminal via a network, comprising:

a video transmitting device adapted to transmit image signals obtained by the video camera; and

a control device adapted to control the video camera on the basis of a control command from the computer terminal;

wherein said control device is adapted to start to execute automatic control of the video camera with transmitting image signals obtained by the automatic control to the computer terminal if the control command for the video camera is not received from the computer terminal for a predetermined period.

Claim 2 (Cancelled).

Claim 3 (Previously Presented): A camera control system according to claim 1, wherein said control device stops automatic control of the video camera if the video image of the video camera is not outputted by said video transmitting device.

Claim 4 (Previously Presented): A camera control system according to claim 1, further comprising:

an issuing device adapted to issue a control right of the video camera to one of a plurality of computer terminals which makes a request to acquire the control right of the video camera which is required for said control device to control the video camera,

wherein said control device executes automatic control of the video camera if the control right of the video camera is not issued to any of the plurality of computer terminals by said issuing device.

Claim 5 (Previously Presented): A camera control system according to claim 4, wherein said control device executes automatic control of the video camera if a predetermined time period elapses after the control right of the video camera is released.

Claim 6 (Previously Presented): A camera control system according to claim 4, further comprising:

video transmitting device adapted to transmit a video image of the video camera in response to a request from each of the plurality of computer terminals,

wherein said control device stops automatic control of the video camera if the video image of the video camera is not outputted from said video transmitting device to any computer terminal other than the computer terminal to which the control right of the video camera is issued.

Claim 7 (Previously Presented): A camera control system according to claim 4, wherein said issuing device issues control rights of a predetermined plurality of video cameras to one computer terminal.

Claim 8 (Previously Presented): A camera control system according to claim 7, wherein said control device executes automatic control of the predetermined plurality of video cameras if the control rights of the predetermined plurality of video cameras are not issued to any of the computer terminals by said issuing device.

Claim 9 (Previously Presented): A camera control system according to claim 7, wherein said control device executes automatic control of the predetermined plurality of video

cameras excluding a video camera whose control right is received, if the control rights of the predetermined plurality of video cameras are issued to one computer terminal by said issuing device.

Claim 10 (Previously Presented): A camera control system according to claim 7, wherein said control device executes automatic control of video cameras whose control rights are not received for a predetermined time period, from among the predetermined plurality of video cameras, if the control rights of the predetermined plurality of video cameras are issued to one computer terminal by said issuing device.

Claim 11 (Previously Presented): A camera control system according to claim 1, further comprising:

a memory which stores a loci of an image pickup direction of the video camera in a memory,

wherein said control device executes automatic control of the video camera on the basis of the loci of the image pickup direction of the video camera, which is stored in said memory.

Claim 12 (Previously Presented): A camera control system according to claim 1, further comprising:

a memory which stores at least one image pickup direction of the video camera in a memory,

wherein said control device executes automatic control of the video camera in the at least one image pickup direction stored in said memory.

Claim 13 (Previously Presented): A camera control system according to claims 12, wherein said memory stores an image pickup direction relative to a control position in a range in which the video camera can pick up an image.

Claim 14 (Previously Presented): A camera control system according to claim 11, wherein said storage device stores at least one of a zoom magnification, a subject distance and an on/off state of a backlight correction of the video camera, correspondingly with the image pickup direction of the video camera.

Claim 15 (Previously Presented): A camera control system according to claim 1, further comprising:

a measuring device adapted to divide a range of a controllable image pickup direction of the video camera into a plurality of ranges and measuring a time period which elapses when the video camera is being controlled in accordance with a control command from one of the plurality of computer terminals in each of divided ranges,

wherein said control device controls an image pickup direction of the video camera within a particular range of the plurality of divided ranges in which particular range a total of the time periods measured by said measuring device is largest.

Claim 16 (Previously Presented): A camera control system according to claim 8, wherein if automatic control is being executed by said control device, said video transmitting device transmits video signals from the predetermined plurality of video cameras to a computer terminal which has made the video transmission request, while changing over the video signals at intervals of a predetermined time period.

Claim 17 (Previously Presented): A camera control system according to claim 4, further comprising:

a counting device adapted to count at least one of the number of times by which the control right has been issued to each of a predetermined plurality of video cameras by said issuing device, the number of times by which a request to acquire the control right of each of the predetermined plurality of video cameras has been received from the plurality of computer terminals, and the number of times by which said video transmitting device has transmitted a video image from each of the predetermined plurality of video cameras to the plurality of computer terminals; and

a changeover device adapted to control changeover time periods of outputting of video signals of the predetermined plurality of video cameras, on the basis of the number of times counted by said counting device,

wherein if automatic control is being executed by said control device, said video transmitting device changes over the video images from the predetermined plurality of video cameras on the basis of the changeover time periods controlled by said changeover device and outputs a video image to a computer terminal which has made the video transmission request.

Claim 18 (Previously Presented): A camera control system according to claim 17, wherein said changeover device controls the changeover time periods of outputting of the video signals of the predetermined plurality of video cameras in proportion to the number of times counted by said counting device.

Claim 19 (Previously Presented): A camera control system comprising:

a video camera;

a control device adapted to control the video camera;

an automatic control device adapted to start to execute automatic control of the video camera with transmitting image signals obtained by the automatic control to a computer

terminal if a control command for the video camera is not received from the computer terminal for a predetermined period; and

a plurality of computer terminals for enabling said control device to output the control command for the video camera via a network.

Claim 20 (Previously Presented): A control method for a camera control system for controlling a video camera from a computer terminal via a network, said control method comprising:

a control step of controlling the video camera on the basis of a control command from the computer terminal; and

an automatic control step of starting to execute automatic control of the video camera with transmitting image signals obtained by the automatic control to the computer terminal if the control command for the video camera is not received from the computer terminal for a predetermined period.

Claim 21 (Cancelled).

Claim 22 (Previously Presented): A control method according to claim 20, further comprising:

a video transmitting step of transmitting a video image of the video camera in response to a request from a plurality of computer terminals,

wherein said automatic control step stops automatic control of the video camera if the video image of the video camera is not outputted by said video transmitting step.

Claim 23 (Previously Presented): A control method according to claim 20, further comprising:

an issuing step of issuing a control right of the video camera to one of a plurality of computer terminals which makes a request to acquire the control right of the video camera which is required for said control step to control the video camera,

wherein said automatic control step stops automatic control of the video camera if the control right of the video camera is not issued to any of the plurality of computer terminals by the issuing step.

Claim 24 (Original): A control method according to claim 23, wherein said automatic control step executes automatic control of the video camera if a predetermined time period elapses after the control right of the video camera is released.

Claim 25 (Original): A control method according to claim 23, further comprising:
a video transmitting step of transmitting a video image of the video camera in response to a request from each of the plurality of computer terminals,

wherein said automatic control step stops automatic control of the video camera if the video image of the video camera is not outputted by video transmitting step to any computer terminal other than the computer terminal to which the control right of the video camera is issued.

Claim 26 (Original): A control method according to claim 23, wherein said issuing step issues control rights of a predetermined plurality of video cameras to one computer terminal.

Claim 27 (Original): A control method according to claim 26, wherein said automatic control step executes automatic control of the predetermined plurality of video cameras if the control rights of the predetermined plurality of video cameras are not issued to any of the computer terminals by said issuing step.

Claim 28 (Original): A control method according to claim 26, wherein said automatic control step executes automatic control of the predetermined plurality of video cameras excluding a video camera whose control right is received, if the control rights of the predetermined plurality of video cameras are issued to one computer terminal by said issuing step.

Claim 29 (Original): A control method according to claim 26, wherein said automatic control step executes automatic control of video cameras whose control rights are not received for a predetermined time period, from among the predetermined plurality of video cameras, if the control rights of the predetermined plurality of video cameras are issued to one computer terminal by said issuing step.

Claim 30 (Original): A control method according to claim 20, further comprising:
a storage step of storing a loci of an image pickup direction of the video camera,
wherein said automatic control step executes automatic control of the video camera on the basis of the loci of the image pickup direction of the video camera, which is stored by said storage step.

Claim 31 (Original): A control method according to claim 20, further comprising:
a storage step of storing at least one image pickup direction of the video camera,
wherein said automatic control step executes automatic control of the video camera in the at least one image pickup direction stored by said storage step.

Claim 32 (Original): A control method according to claim 31, wherein said storage step stores an image pickup direction relative to a central position in a range in which the video camera can pick up an image.

Claim 33 (Original): A control method according to claim 30 or 31, wherein said

storage step stores at least one of a zoom magnification, a subject distance and an on/off state of a backlight correction of the video camera, correspondingly with the image pickup direction of the video camera.

Claim 34 (Original): A control method according to claim 20, further comprising:
a measuring step of dividing a range of a controllable image pickup direction of the video camera into a plurality of ranges and measuring a time period which elapses when the video camera is being controlled in accordance with a control command from one of the plurality of computer terminals in each of the plurality of divided ranges,

wherein said automatic control step controls an image pickup direction of the video camera within a particular range of the plurality of divided ranges in which particular range a total of the time periods measured by said measuring step is largest.

Claim 35 (Original): A control method according to claim 27, further comprising:
a video transmitting step of transmitting a video image of the video camera in response to a video transmission request from each of the plurality of computer terminals,

wherein if automatic control is being executed by said automatic control step, said video transmitting step transmits video signals from the predetermined plurality of video cameras to a computer terminal which has made the video transmission request, while changing over the video signals at intervals of a predetermined time period.

Claim 36 (Original): A camera control system according to claim 23, further comprising:

a video transmitting step of transmitting a video image of the video camera in response to a video transmission request from each of the plurality of computer terminals;

a counting step of counting at least one of the number of times by which the control

right has been issued to each of a predetermined plurality of video cameras by said issuing step, the number of times by which a request to acquire the control right of each of the predetermined plurality of video cameras has been received from the plurality of computer terminals, and the number of times by which said video transmitting step has transmitted a video image from each of the predetermined plurality of video cameras to the plurality of computer terminals; and

a changeover step of controlling changeover time periods of outputting of video signals of the predetermined plurality of video cameras, on the basis of the number of times counted by said counting step,

wherein if automatic control is being executed by said automatic control step, said video transmitting step changes over the video images from the predetermined plurality of video cameras on the basis of the changeover time periods controlled by said changeover step and outputs a video image to a computer terminal which has made the video transmission request.

Claim 37 (Original): A control method according to claim 36, wherein said changeover step controls the changeover time periods of outputting of the video signals of the predetermined plurality of video cameras in proportion to the number of times counted by said counting step.

Claim 38 (Previously Presented): A storage medium which stores therein a program for executing control over a camera control system for controlling a video camera from a computer terminal via a network, said program comprising processes of:

controlling the video camera on the basis of a control command from the computer terminal; and

starting to execute automatic control of the video camera with transmitting image signals obtained by the automatic control to the computer terminal if the control command for the video camera is not received from the computer terminal for a predetermined period.

Claim 39 (Cancelled).

Claim 40 (Previously Presented): A storage medium according to claim 38, wherein said program further comprises processes of:

transmitting a video image of the video camera in response to a request from a plurality of computer terminals, and

stopping automatic control of the video camera if the video image of the video camera is not outputted.

Claim 41 (Previously Presented): A storage medium according to claim 38, wherein said program further comprises processes of:

issuing a control right of the video camera to one of a plurality of computer terminals which makes a request to acquire the control right of the video camera which is required to control the video camera; and

executing automatic control of the video camera if the control right of the video camera is not issued to any of the plurality of computer terminals.

Claim 42 (Original): A storage medium according to claim 41, wherein said program further comprises a process of executing automatic control of the video camera if a predetermined time period elapses after the control right of the video camera is released.

Claim 43 (Original): A storage medium according to claim 41, wherein said program further comprises processes of:

transmitting a video image of the video camera in response to a request from each of

the plurality of computer terminals; and

stopping automatic control of the video camera if the video image of the video camera is not outputted to any computer terminal other than the computer terminal to which the control right of the video camera is issued.

Claim 44 (Original): A storage medium according to claim 41, wherein said program further comprises a process of issuing control rights of a predetermined plurality of video cameras to one computer terminal.

Claim 45 (Original): A storage medium according to claim 44, wherein said program further comprises a process of executing automatic control of the predetermined plurality of video cameras if the control rights of the predetermined plurality of video cameras are not issued to any of the computer terminals.

Claim 46 (Original): A storage medium according to claim 44, wherein said program further comprises a process of executing automatic control of the predetermined plurality of video cameras excluding a video camera whose control right is received, if the control rights of the predetermined plurality of video cameras are issued to one computer terminal.

Claim 47 (Original): A storage medium according to claim 44, wherein said program further comprises a process of executing automatic control of video cameras whose control rights are not received for a predetermined time period, from among the predetermined plurality of video cameras, if the control rights of the predetermined plurality of video cameras are issued to one computer terminal.

Claim 48 (Original): A storage medium according to claim 38, wherein said program further comprises processes of storing a loci of an image pickup direction of the video camera, and executing automatic control of the video camera on the basis of the loci of the

image pickup direction of the video camera which is stored.

Claim 49 (Original): A storage medium according to claim 38, wherein said program further comprises processes of storing at least one image pickup direction of the video camera, and executing automatic control of the video camera in the stored at least one image pickup direction.

Claim 50 (Original): A storage medium according to claim 49, wherein said program further comprises a process of storing an image pickup direction relative to a central position in a range in which the video camera can pick up an image.

Claim 51 (Original): A storage medium according to claim 48 or 49, wherein said program further comprises a process of storing at least one of a zoom magnification, a subject distance and an on/off state of a backlight correction of the video camera, correspondingly with the image pickup direction of the video camera.

Claim 52 (Original): A storage medium according to claim 38, wherein said program further comprises processes of dividing a range of a controllable image pickup direction of the video camera into a plurality of ranges and measuring a time period which elapses when the video camera is being controlled in accordance with a control command from one of the plurality of computer terminals in each of the plurality of divided ranges, and controlling an image pickup direction of the video camera within a particular range of the plurality of divided ranges in which particular range a total of the measured time periods is largest.

Claim 53 (Original): A storage medium according to claim 45, wherein said program further comprises processes of transmitting a video image of the video camera in response to a video transmission request from each of the plurality of computer terminals, and, if automatic control is being executed, transmitting video signals from the predetermined plurality of video

cameras to a computer terminal which has made the video transmission request, while changing over the video signals at intervals of a predetermined time period.

Claim 54 (Original): A storage medium according to claim 41, wherein said program further comprises processes of:

transmitting a video image of the video camera in response to a video transmission request from each of the plurality of computer terminals;

counting at least one of the number of times by which the control right has been issued to each of a predetermined plurality of video cameras, the number of times by which a request to acquire the control right of each of the predetermined plurality of video cameras has been received from the plurality of computer terminals, and the number of times by which a video image has been transmitted from each of the predetermined plurality of video cameras to the plurality of computer terminals;

controlling changeover time periods of outputting of video signals of the predetermined plurality of video cameras, on the basis of the counted number of times; and

if automatic control is being executed, changing over the video images from the predetermined plurality of video cameras on the basis of the controlled changeover time periods and outputting a video image to a computer terminal which has made the video transmission request.

Claim 55 (Original): A storage medium according to claim 54, wherein said program further comprises a process of controlling the changeover time periods of outputting of the video signals of the predetermined plurality of video cameras in proportion to the counted number of times.

Claim 56 (New) A camera control apparatus for controlling a video camera in

accordance with a control command from a computer terminal via a network, comprising:

a control device adapted to control the video camera on the basis of a control command from the computer terminal; and

an issuing device adapted to issue a control right of the video camera which is required for said computer terminal to control the video camera, to the computer terminal,

wherein said control device executes automatic control of the video camera, if the control right of the video camera is not issued to the computer terminal by said issuing device for a predetermined period.

Claim 57 (New) A camera control apparatus according to claim 56, wherein said control device executes automatic control of the video camera if a predetermined time period elapses after the control right of the video camera is released.

Claim 58 (New) A camera control apparatus according to claim 56, further comprising:

a video transmitting device adapted to transmit image signals obtained by the video camera;

wherein said control device executes automatic control of the video camera and said video transmitting device transmits the image signals of the controlled camera, if the control right of the video camera is not issued to the computer terminal by said issuing device for the predetermined period.

Claim 59 (New) A camera control apparatus according to claim 56, wherein said issuing device issues the control right of the video camera to one of a plurality of computer terminals which makes a request to request to acquire the control right of the video camera which is required for said control device to control the video camera, and

said control device executes automatic control of the video camera if the control right of the video camera is not issued to any of the plurality of computer terminals by said issuing device for the predetermined period.

Claim 60 (New) A camera control apparatus according to claim 56, further comprising:

a memory which stores a loci of an image pickup direction of the video camera in a memory,

wherein said control device executes automatic control of the video camera on the basis of the loci of the image pickup direction of the video camera, which is stored in said memory.

Claim 61 (New) A camera control apparatus according to claim 56, further comprising:

a memory which stores at least one image pickup direction of the video camera in a memory,

wherein said control device executes automatic control of the video camera in the at least one image pickup direction stored in said memory.

Claim 62 (New) A camera control apparatus according to claim 61, wherein the image pickup direction is a central position within the controllable image pickup range of the video camera.

Claim 63 (New) A camera control method for controlling a video camera in accordance with a control command from a computer terminal via a network, comprising:

a control step of controlling the video camera on the basis of a control command from the computer terminal; and

an automatic control step of executing automatic control of the video camera, if the control right of the video camera which is required for said the computer terminal to control the video camera is not issued to the computer terminal for a predetermined period.

Claim 64 (New) A camera control method according to claim 63, wherein said automatic control step executes automatic control of the video camera if a predetermined time period elapses after the control right of the video camera is released.

Claim 65 (New) A camera control method according to claim 63, further comprising:
a video transmitting step of transmitting image signals obtained by the video camera;
wherein said automatic control step executes automatic control of the video camera and said video transmitting step transmits the image signals of the controlled camera, if the control right of the video camera is not issued to the computer terminal for the predetermined period.

Claim 66 (New) A camera control method according to claim 63, wherein said control step controls the video camera on the basis of a control command from one of a plurality of computer terminals, and

said automatic control step executes automatic control of the video camera if the control right of the video camera is not issued to any of the plurality of computer terminals for the predetermined period.

Claim 67 (New) A camera control apparatus according to claim 63, wherein said automatic control step executes automatic control of the video camera on the basis of a loci of the image pickup direction of the video camera, which is stored in a memory.

Claim 68 (New) A camera control method according to claim 63, wherein said automatic control step executes automatic control of the video camera in the at least one

image pickup direction stored in a memory.

Claim 69 (New) A camera control method according to claim 68, wherein the image pickup direction is a central position within the controllable image pickup range of the video camera.

Claim 70 (New) A storage medium which stores therein a program for executing a camera control method for controlling a video camera in accordance with a control command from a computer terminal via a network, said program comprising the processes of:

controlling the video camera on the basis of a control command from the computer terminal; and

executing automatic control of the video camera, if the control right of the video camera which is required for said the computer terminal to control the video camera is not issued to the computer terminal for a predetermined period.